REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

Responding in point order to the Examiner's objections:

Claims 1, 19, 21, 23 and 25 stand rejected under 35 U.S.C. 103(a), based on United States Patent Application Publication No. 2002/0024973 to Tavana *et al.*, hereinafter referred to as Tavana, in view of United States Patent No. 6,075,773 to Clark *et al.*, hereinafter referred to as Clark.

In rejecting Claim 25, the action alleged that Tavana discloses the invention substantially as claimed, including an apparatus, which can be implemented in hardware or software code for dispatching bursts of packets onto a computer network. The program memory comprising test packet sequencer software comprising a series of instructions executable by the processor under control of an operating system, the instructions, if executed by the processor, causing the processor to: establish a first I/O completion port (Tavana discloses a "PHY 24:1" which is alleged to be equivalent to "a first I/O completion port", Abstract, lines 1 to 13, Figure 1; [0002]); generate a plurality of test packets (Tavana: Abstract, lines 1 to 13, Figure 1; [0002]); forward to the first I/O completion port a

request that the test packets be dispatched; and dispatch the test packets onto the network by way of the network interface under control of the first I/O completion port (Tavana: Abstract, lines 1 to 13, Figure 1; [0002]); measure departure time of each of the test packets; and measure return time of each of the test packets: (Tavana: Abstract, lines 1 to 13, Figure 1; [0002]); a network interface (Tavana: Figure 1; items 22:1, 24:1; [0002]). The action stated that Tavana does not explicitly disclose a computer processor, (Clark discloses a packet generating Ethernet testing device comprising "a microprocessor", alleging that this is equivalent to "A computer processor": Abstract, lines 1 to 5); a program memory accessible to the processor, (Clark discloses a packet memory for storing the generated test packets, and Clark discloses the interacting between the processor and packet memory; Abstract, lines 1 to 20, column 4, lines 45 to 60). The action therefore alleged that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Clark's ideas of incorporating processes of a processor which generates and dispatches test packets into memory and a memory used to store test packets with Tavana's system in order to be able to provide an efficient network diagnostic system.

The Applicant respectfully disagrees with the action and asserts that Tavana is directed towards a hardware time stamping method and system, which is in direct contrast to the software based test packet sequencer according to the instant invention. In particular as expressly defined in independent Claims 1, 23 and 25, an I/O completion port receives a request to dispatch test packets and is also used to actually dispatch these test packets. An I/O completion port as identified in independent Claims 1, 23 and 25, is known in the art as a software interface which provides a means for an application to use a pool of threads that were created when the application was started in order to process input/output (I/O) requests. For example, an I/O completion port can provide a means for managing a pool of threads efficiently and control the amount of concurrency therein. In a client-server situation where a large number of clients connect to a server, for example an I/O completion port allows for one to pre-create a set of threads, forming a pool, and allocate these threads to requests from clients using a scheduling scheme. It is therefore clear that the method, program product and apparatus for dispatching bursts of packets as defined in independent Claims 1, 23 and 25 respectively are firmly based in software. As identified above, this aspect of the instant invention as defined in the independent claims

currently on file, is not taught or disclosed in Tavana, wherein Tavana is directed towards a hardware time stamping method and system. In fact, contrary to the action's assertion, Tavana uses a physical medium interface "PHY 24:1" namely a hardware component to facilitate packet transfer, and does not teach or suggest an I/O completion port which as defined above is a software interface.

In further support of this stance, Tavana even expressly teaches away from the use of software for the purpose of time stamping, for example with reference to paragraph [0003], wherein Tavana identifies that a "disadvantage of such prior art systems is that since the packet time-tagging occurs at the application software, the propagation time through the software stacks are included in the round trip time that the application software calculates". Tavana continues to define that since the delays induced via [application software] time stamping schemes are non-deterministic, accurate arrival and network infrastructure transit times are not possible to predict.

Furthermore, Tavana expressly defines in paragraph [0006] that the hardware time stamping system "removes the delays induced by software time stamping schemes" and continues to define that the hardware time stamping system "requires that a time value be associated to all packets that are received from

the physical layer" and that this "operation is performed by hardware to minimize delays...". Therefore is it clearly evident that Tavana expressly teaches away from the method, program product and apparatus for dispatching bursts of packets as defined in independent Claims 1, 23 and 25, currently on file, respectively.

In addition, Clark does not cure the fundamental deficiencies as identified in Tavana, and thus for the reasons set forth above, the Applicant strongly asserts that independent Claims 1, 23 and 25 are inventive over Tavana-Clark. The Applicant further asserts that as Claims 19 and 21 are dependent on Claim 1, these dependent claims are equally inventive over Tavana-Clark. The Applicant therefore asserts that Claims 1, 19, 21, 23 and 25 currently on file, are inventive over Clark, and therefore respectfully requests that the Examiner withdraw this 35 U.S.C. 103(a) objection.

The action stated that Claim 2, currently on file, is rejected under 35 U.S.C. 103(a), alleging that the subject matter of this claim is unpatentable over Tavana-Clark in view of United States Patent No. 5,812,528 to VanDervort, hereinafter referred to as VanDervort.

Based on the above arguments, the Applicant asserts that independent Claim 1, on which Claim 2 depends, is inventive in

light of Tavana-Clark. As VanDervort does not cure the fundamental deficiencies identified in the combination of Tavana and Clark, Claim 2 currently on file is therefore inventive in light of Tavana-Clark in view of VanDervort. The Applicant therefore asserts that Claim 2 currently on file complies with 35 U.S.C. 103(a) and respectfully requests this objection be withdrawn.

The action stated that Claims 3 to 10, 17, 22 and 26, currently on file, are rejected under 35 U.S.C. 103(a), alleging that the subject matter of these claims is unpatentable over Tavana-Clark in view of United States Patent No. 5,477,531 to McKee *et al.*, hereinafter referred to as McKee.

Based on the above arguments, the Applicant asserts that independent Claims 1 and 25, on one of which Claims 3 to 10, 17, 22 and 26 directly or indirectly depend, are inventive in light of Tavana-Clark. As McKee does not cure the fundamental deficiencies identified in the combination of Tavana and Clark, Claims 3 to 10, 17, 22 and 26 currently on file are therefore inventive in light of Tavana-Clark in view of McKee. The Applicant therefore asserts that Claims 3 to 10, 17, 22 and 26 currently on file comply with 35 U.S.C. 103(a) and respectfully requests this objection be withdrawn.

The action stated that Claims 18 and 24, currently on file, are rejected under 35 U.S.C. 103(a), alleging that the subject matter of these claims is unpatentable over Tavana-Clark in view of United States Patent No. 6,076,113 to Ranmanathan *et al.*, hereinafter referred to as Ranmanathan.

Based on the above arguments, the Applicant asserts that independent Claims 1 and 23, on one of which Claims 18 and 24 depend, are inventive in light of Tavana-Clark. As Ranmanathan does not cure the fundamental deficiencies identified in the combination of Tavana and Clark, Claims 18 and 24 are therefore inventive in light of Tavana-Clark in view of Ranmanathan. The Applicant therefore asserts that Claims 18 and 24 comply with 35 U.S.C. 103(a) and respectfully requests this objection be withdrawn.

The action stated that Claim 20, currently on file, is rejected under 35 U.S.C. 103(a), alleging that the subject matter of this claim is unpatentable over Tavana-Clark-Ranmanathan in view of United States Patent No. 6,016,308 to Crayford *et al.*, hereinafter referred to as Crayford.

Based on the above arguments, the Applicant asserts that independent Claim 1, on which Claim 20 indirectly depends, is inventive in light of Tavana-Clark. As neither Ranmanathan nor Crayford cure the fundamental deficiencies identified in the

combination of Tavana and Clark, Claim 20 currently on file is therefore inventive in light of Tavana-Clark in view of Ranmanathan in further view of Crayford. The Applicant therefore asserts that Claim 20 currently on file complies with 35 U.S.C. 103(a) and respectfully requests this objection be withdrawn.

Claim 11, currently on file, is rejected under 35 U.S.C. 103(a), alleging that the subject matter of this claim is unpatentable over Tavana-Clark-McKee in view of United States Patent No. 5,640,504 to Johnson, Jr., hereinafter referred to as Johnson.

Based on the above arguments, the Applicant asserts that independent Claim 1, on which claim 11 indirectly depends, is inventive in light of Tavana-Clark. As neither McKee nor Johnson cure the fundamental deficiencies identified in the combination of Tavana and Clark, Claim 11 currently on file is therefore inventive in light of Tavana-Clark in view of McKee in further view of Johnson. The Applicant therefore asserts that Claim 11 currently on file complies with 35 U.S.C. 103(a) and respectfully requests this objection be withdrawn.

The action stated that Claims 12 to 16, currently on file, are rejected under 35 U.S.C. 103(a), alleging that the subject matter of these claims is unpatentable over Tavana-Clark-McKee-

Johnson in view of United States Patent No. 5,699,539 to Garber *et al.*, hereinafter referred to as Garber.

Based on the above arguments, the Applicant asserts that independent Claim 1, on which Claims 12 to 16 directly or indirectly depend, is inventive in light of Tavana-Clark. As none of McKee, Johnson, or Garber cure the fundamental deficiencies identified in the combination of Tavana and Clark, Claims 12 to 16 currently on file are therefore inventive in light of Tavana-Clark in view of McKee, in view of Johnson, in further view of Garber. The Applicant therefore asserts that Claims 12 to 16 currently on file comply with 35 U.S.C. 103(a) and respectfully requests this objection be withdrawn.

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any

claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant asks that all claims be allowed. Please apply the $500 Notice of Appeal fee and the 3 month extension of time fee in the amount of $1,020, and any other applicable charges or credits, to Deposit Account No. 06-1050.

Respectfully submitted,

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